

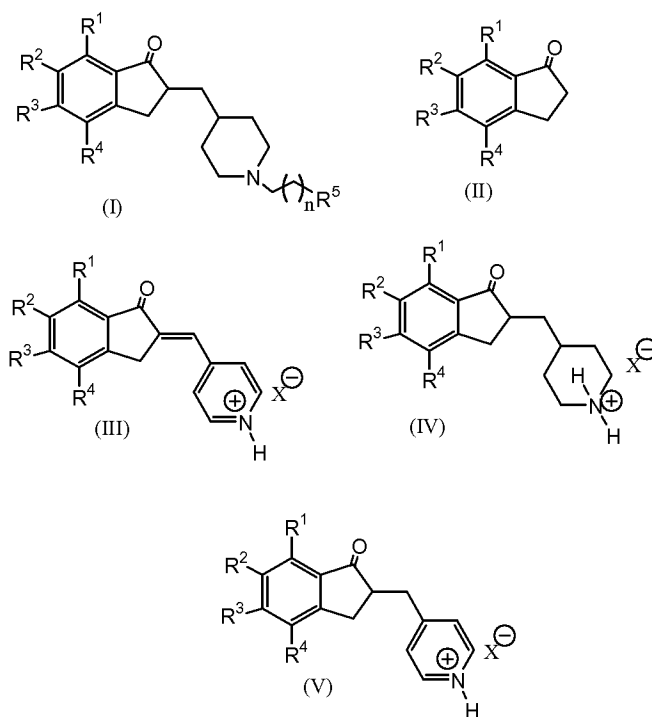
Amendment to the Claims:

The claim listing which begins on the next page will replace all prior versions, and listings, of claims in the application.

Claim Listing

Claim 1. (Original) A process for producing a Donepezil derivative of formula (I), wherein R^1 , R^2 , R^3 , and R^4 each independently represents H, F, an alkyl having from 1 to 4 carbon atoms, or an alkoxy having from 1 to 4 carbon atoms; R^5 represents a phenyl or a substituted phenyl; and n is an integer from 0 to 2, characterized in that the process comprises:

- a) a reaction of 4-pyridinecarboxaldehyde with a compound of formula (II) to form in the presence of a strong acid HX a compound of the formula (III);
- b) a catalytic hydrogenation of a compound of formula (III) or the compound of formula (V) to yield a compound of formula (IV); and
- c) an alkylation reaction of a compound of formula (IV) to yield a compound of formula (I).



Claim 2. (Original) The process according to claim 1 for the preparation of a compound of the general formula (I), wherein R^1 , R^2 , R^3 , and R^4 each independently represents H, F, an alkyl having from 1 to 4 carbon atoms, or an alkoxy having 1 to 4 carbon atoms; R^5 represents a phenyl or substituted phenyl; and n is an integer from 0 to 2, characterized in that a compound of

formula (I) is produced by reacting a compound of formula $Y-(CH_2)_{n+1}R^5$ with a compound of formula (IV) in the presence of a base, wherein Y represents a chlorine atom, a bromine atom, or an iodine atom.

Claim 3. (Original) The process according to claim 1 for the preparation of a compound of the general formula (I), wherein R^1 , R^2 , R^3 , and R^4 each independently represents H, F, an alkyl having from 1 to 4 carbon atoms, or an alkoxy having from 1 to 4 carbon atoms; R^5 represents a phenyl or a substituted phenyl; and n is an integer from 0 to 2, characterized in that a compound of formula (I) is produced by reacting a compound of formula $OHC-(CH_2)_nR^5$ with a compound of formula (IV), in the presence of a reducing agent.

Claim 4. (Original) The process according to claim 1 for the preparation of a compound of the general formula (I), wherein R^1 , R^2 , R^3 , and R^4 each independently represents H, F, an alkyl having from 1 to 4 carbon atoms, or an alkoxy having from 1 to 4 carbon atoms; HX represents an alkyl sulfonic acid, benzene sulfonic acid, a substituted benzene sulfonic acid, hydrochloric acid, sulfuric acid, nitric acid, or phosphoric acid, characterized in that a compound of formula (IV) is produced by the catalytic hydrogenation of a compound of formula (III).

Claim 5. (Original) The process according to claim 1 for the preparation of a compound of the general formula (I), wherein R^1 , R^2 , R^3 , and R^4 each independently represents H, F, an alkyl having from 1 to 4 carbon atoms, or an alkoxy having from 1 to 4 carbon atoms; and HX represents a strong acid, characterized in that a compound of formula (IV) is produced by catalytic hydrogenation of a compound of formula (V).

Claim 6. (Original) The process according to claim 1 for the preparation of a compound of the general formula (I), wherein R^1 , R^2 , R^3 , and R^4 each independently represents H, F, an alkyl having from 1 to 4 carbon atoms, or an alkoxy having from 1 to 4 carbon atoms; and HX represents a strong acid, characterized in that 4-pyridinecarboxaldehyde reacts with a compound of formula (II) in the presence of a strong acid HX to form a compound of the formula (III).

Claims 7.-10. Cancelled

Claim 11. (New) The process according to claim 1 for the preparation of a compound of the general formula (I), characterized in that R^1 represents hydrogen; R^2 represents a methoxy; R^3 represents a methoxy; R^4 represents hydrogen; R^5 represents a phenyl or a 3-fluorophenyl; n is 0; HX represents methyl sulfonic acid, benzene sulfonic acid, or p-toluenesulfonic acid; and Y represents a chlorine, a bromine, or an iodine.

Claim 12. (New) The process according to claim 2 for the preparation of a compound of the general formula (I), characterized in that R^1 represents hydrogen; R^2 represents a methoxy; R^3 represents a methoxy; R^4 represents hydrogen; R^5 represents a phenyl or a 3-fluorophenyl; n is 0; HX represents methyl sulfonic acid, benzene sulfonic acid, or p-toluenesulfonic acid; and Y represents a chlorine, a bromine, or an iodine.

Claim 13. (New) The process according to claim 3 for the preparation of a compound of the general formula (I), characterized in that R^1 represents hydrogen; R^2 represents a methoxy; R^3 represents a methoxy; R^4 represents hydrogen; R^5 represents a phenyl or a 3-fluorophenyl; n is 0; HX represents methyl sulfonic acid, benzene sulfonic acid, or p-toluenesulfonic acid; and Y represents a chlorine, a bromine, or an iodine.

Claim 14. (New) The process according to claim 6 for the preparation of a compound of the general formula (I), characterized in that R^1 represents hydrogen; R^2 represents a methoxy; R^3 represents a methoxy; R^4 represents hydrogen; R^5 represents a phenyl or a 3-fluorophenyl; n is 0; HX represents methyl sulfonic acid, benzene sulfonic acid, or p-toluenesulfonic acid; and Y represents a chlorine, a bromine, or an iodine.

Claim 15. (New) The process according to claim 1 for the preparation of a compound of the general formula (I) wherein within said compound of formula (III) R^1 represents hydrogen, R^2 represents methoxy, R^3 represents methoxy, R^4 represents hydrogen, and HX represents methyl sulfonic acid, benzene sulfonic acid, or p-toluenesulfonic acid, characterized in that said

compound of formula (IV) is produced from a compound of formula (III) by catalytic hydrogenation, wherein the catalyst is platinum, palladium, nickel, ruthenium, or salts or oxides thereof.

Claim 16. (New) The process according to claim 4 for the preparation of a compound of the general formula (I) wherein within said compound of formula (III) R^1 represents hydrogen, R^2 represents methoxy, R^3 represents methoxy, R^4 represents hydrogen, and HX represents methyl sulfonic acid, benzene sulfonic acid, or p-toluenesulfonic acid, characterized in that said compound of formula (IV) is produced from a compound of formula (III) by catalytic hydrogenation, wherein the catalyst is platinum, palladium, nickel, ruthenium, or salts or oxides thereof.

Claim 17. (New) The process according to claim 5 for the preparation of a compound of the general formula (I) wherein within said compound of formula (III) R^1 represents hydrogen, R^2 represents methoxy, R^3 represents methoxy, R^4 represents hydrogen, and HX represents methyl sulfonic acid, benzene sulfonic acid, or p-toluenesulfonic acid, characterized in that said compound of formula (IV) is produced from a compound of formula (III) by catalytic hydrogenation, wherein the catalyst is platinum, palladium, nickel, ruthenium, or salts or oxides thereof.

Claim 18. (New) The process according to claim 1 for the preparation of a compound of the general formula (I), wherein within said compound of formula (V) R^1 represents hydrogen, R^2 represents methoxy, R^3 represents methoxy, R^4 represents hydrogen, and HX represents methyl sulfonic acid, benzene sulfonic acid, or p-toluenesulfonic acid, characterized in that said compound of formula (IV) is produced from a compound of formula (V) by catalytic hydrogenation, wherein the catalyst is platinum, palladium, nickel, ruthenium, or salts or oxides thereof.

Claim 19. (New) The process according to claim 4 for the preparation of a compound of the general formula (I), wherein within said compound of formula (V) R^1 represents hydrogen, R^2

represents methoxy, R^3 represents methoxy, R^4 represents hydrogen, and HX represents methyl sulfonic acid, benzene sulfonic acid, or p-toluenesulfonic acid, characterized in that said compound of formula (IV) is produced from a compound of formula (V) by catalytic hydrogenation, wherein the catalyst is platinum, palladium, nickel, ruthenium, or salts or oxides thereof.

Claim 20. (New) The process according to claim 5 for the preparation of a compound of the general formula (I), wherein within said compound of formula (V) R^1 represents hydrogen, R^2 represents methoxy, R^3 represents methoxy, R^4 represents hydrogen, and HX represents methyl sulfonic acid, benzene sulfonic acid, or p-toluenesulfonic acid, characterized in that said compound of formula (IV) is produced from a compound of formula (V) by catalytic hydrogenation, wherein the catalyst is platinum, palladium, nickel, ruthenium, or salts or oxides thereof.

Claim 21. The process according to claim 1 for the preparation of a compound of the general formula (I), characterized in that reacting 4-pyridinecarboxaldehyde with a compound of formula (II) in the presence of methyl sulfonic acid, benzene sulfonic acid, or p-toluenesulfonic acid yields a compound of formula (III), wherein R^1 represents hydrogen, R^2 represents methoxy, R^3 represents methoxy, and R^4 represents hydrogen.

Claim 22. The process according to claim 6 for the preparation of a compound of the general formula (I), characterized in that reacting 4-pyridinecarboxaldehyde with a compound of formula (II) in the presence of methyl sulfonic acid, benzene sulfonic acid, or p-toluenesulfonic acid yields a compound of formula (III), wherein R^1 represents hydrogen, R^2 represents methoxy, R^3 represents methoxy, and R^4 represents hydrogen.